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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/217,932	12/22/1998	EN-SEUNG KANG	P55501	3765

7590

12/12/2002

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EXAMINER

ZAND, KAMBIZ

ART UNIT

PAPER NUMBER

2132

DATE MAILED: 12/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/217,932

Applicant(s)

KANG ET AL.

Examiner

Kambiz Zand

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 and 34-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-30 and 33 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Applicant provisionally elects, with traverse, the invention of Group II, claims 20-33.
4. Claims 1-19 and 34-69 are withdrawn from examination.
5. Claims 20-33 are pending.

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description Page 7, line 9, item "11a"; line 17-18, 26-27 and 30, item 11b; page 8, line 19, item 21b; page 18, line 12, item S220; page 23, line 4, item S455 and line 17, item S585.

Correction is required.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "14" in fig. 1; "100,101,102,103,104" in fig.6; "S540" in fig.7; "S200" in fig.18; "S350" in fig. 20 and "21a, 20,21b, 22,23 and 24" in fig.4. Correction is required.

Response to Traverse

8. Applicant's election with traverse of group II in Paper No. 8 is acknowledged.
- The traversal is on the ground(s) that "groups I and II do not have separate utility and should be commonly classified". This is found not persuasive because although group I and II has common features such as encryption of digital content but group I has a separate utility, copy protection by " storing key information " classified in class 713/193. having a common feature such as encryption of digital content does not mean they do not have a separate utility.
 - The traversal is on the ground(s) that " no claims of group V calls for the scrambling of a video electric signal nor utilizing a control signal to modify a video electric signal". This is not found persuasive because encrypting digital content and decryption and replay the content is a modification of video content having code signal classified in 380/239.
 - The traversal is on the ground(s) that " there is no video claimed in the claims of group VII". This is not found persuasive and confusing because utility and classification are not same issue.

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With respect to Applicant's traverse that " if the search can be made without serious burden, the Examiner must examine it on the merits". Examiner refers Applicant to the followings reasons:

- Because these inventions are distinct for the reasons given **and** have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- Because these inventions are distinct for the reasons given **and** the search required for any one Group is not required for any other Group, restriction for examination purposes as indicated is proper.
- Because these inventions are distinct for the reasons given **and** have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. **Claim 33** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. **Claim 33** recites the limitation "the state of the entire header" in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. **Claims 20, 22-27 and 29** are rejected under 35 U.S.C. 102(e) as being anticipated by Kato (6,381,331B1).

As per claims 20, 23 and 25 Kato (6,381,331B1) teaches a protocol, digital content encryption apparatus of the digital content transmission system (see abstract) comprising: a protocol format generator generating a copyright protection protocol (see fig.7, 10 and 13), said copyright protection protocol including a header (see fig.15) and digital contents (see fig.15), said digital contents being encrypted (see col.3, lines 65-67), said header having information for decrypting and explaining the digital contents (see col.3, lines 61-64; col.4, lines 5-11); and a protocol format decoder having decryption algorithm (see abstract and col.col.3, lines 40-43), using key information said protocol format decoder decrypting (see col.6, lines 17-22) and replaying the digital contents according to the information of the header received from the protocol format generator (see col.11, lines 22-27). Also see col.1, lines 47-65 and col.2, lines 1-35.

As per claims 22 and 24 Kato (6,381,331B1) teaches the apparatus of claims 20 and 23 wherein the protocol format decoder generates a user key by adding key information to key generation algorithm and decrypts a temporary validation key by using the user key, said protocol format decoder decrypting the encrypted digital contents with the temporary validation key, said key information being formed to correspond to identity characters of a user (see col.11, lines 13-27 and fig.14).

As per claim 26 Kato (6,381,331B1) teaches the protocol of claim 25, further comprising a field for indicating the size of the encrypted digital contents, and an additional information field (see col.3, lines 65-67).

As per claim 27 Kato (6,381,331B1) teaches the protocol of claim 25, wherein the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field, and an encrypted header field (see col.5, lines 9-27 wherein h represent unencrypted header field 1, and key information field 2 is encrypted header field and the data block is the encrypted payload or content field protected by encryption).

As per claim 29 Kato (6,381,331B1) teaches the protocol of claim 27, wherein the unencrypted header field comprises a copyright library version field (see fig. 11-12), a digital content conversion format field, a key generation algorithm field (see col.3, line 63), a digital content encryption algorithm field (see col.37-41), a field for indicating user authorization information at PC (see col.9, lines 11-13 wherein key information field consist of field2 registration of the user and paid key and col.22-30), and a field for indicating user authorization information at a replaying device (see col.11, lines 13-17 wherein the authorization field is send to user and lines 24-27 wherein the pay field which is the user authorization at replaying device enable the reconstruction of the original content).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 21, 28 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (6,381,331B1) in view of Ginter et al (5,910,987A).

As per claims 21 and 33 Kato (6,381,331B1) teaches all limitation of the claims as applied to claims 20 and 22 but do not disclose explicitly calculates a hash value by adding the user key to hash algorithm, said header including user authorization information with the hash value. However Ginter et al (5,910,987A) teach calculating a hash value by adding the user key to hash algorithm (see col.213, lines 34-59), said header including user authorization information with the hash value (see col.156, lines 19-27; col.155, line 15-16 and col.213, lines 34-59). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Ginter et al (5,910,987A) in kato's header field's method in order to have a secure transaction management and electronic rights protection.

As per claim 28 and 30 Kato (6,381,331B1) teaches the protocol of claim 25, wherein the header comprises a copyright support field for indicating whether the digital contents are under copyright protection, an unencrypted header field (see col. 5, lines 9-27) but

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do not disclose explicitly, a field for indicating the size of the unencrypted header field, an encrypted header field, a field for indicating the size of the encrypted header field and field showing the number of users. However Ginter et al (5,910,987A) teach a field for indicating the size of the unencrypted header field (see col.135, lines 29-32; fig.22 and col.154, lines 3-5), a field for indicating the size of the encrypted header field (see col.135, lines 29-32; fig.22 and col. 154, lines 3-5) and a field showing the number of users (see col. 135, lines 17-22; col.156, lines 46-55). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Ginter et al (5,910,987A) in kato's header field's method in order to have a secure transaction management and electronic rights protection.

Allowable Subject Matter

16. **Claims 31 and 32** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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U.S. Patent No. US (6,424,714B1) teach method and apparatus for providing conditional access in connection-oriented interactive networks with multiplicity of service providers.

U.S. Patent No. US (6,105,134A) teach verification of the source of program information in a conditional access system.

U.S. Patent No. US (5,638,443A) teach system for controlling the distribution and use of composite digital works.

U.S. Patent No. US (6,438,612 B1) teach method and arrangement for secure tunneling of data between virtual routers.


18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (703) 306-4169. The examiner can normally be reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


After-Final (703) 746-7238

Official (703) 746-7239

Non-Official/Draft (703) 746-7240

Kambiz Zand


12/06/02


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